SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service Washington, DC



U.S. Department of Transportation

Federal Aviation Administration

CE-05-85 September 20, 2005

http://www.faa.gov/aircraft/safety/alerts/SAIB

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information
Bulletin advises you, owners and operators of
DG Flugzeugbau (Glaser-Dirks) Models
DG-100, DG-200, DG-300, DG-400: all serial
numbers (S/Ns); DG-500 and DG-500M: all
S/Ns up to 5E23; DG-600, and DG-600M: all
S/Ns; to implement DG Technical Notes:
301/23 Issue 2, 323/14 Issue 2, 348/18 Issue
2, 359/21 Issue 2, 370/9 Issue 2, 826/44 Issue
2, 843/21 Issue 2, and 866/10 Issue 2
(attached). These Technical Notes require an inspection of the outer bearing ring in the rudder mounting assembly and modification or exchange of the rudder bearing mounting assembly.

Background

On a DG-100, the universal bearing of the rudder lower mounting bracket slipped out of the bearing support causing the rudder to fall out. This condition may exist on the abovementioned models.

Recommendation

We recommend that you do the actions of the stated Technical Notes upon receipt of this bulletin. We recommend that a certified mechanic check the position of the outer bearing ring daily during pre-flight inspection until the modification or exchange is done.

For Further Information Contact

Gregory Davison, Glider Program Manager, FAA Small Airplane Directorate, Room 301, 901 Locust Street, Kansas City, Missouri 64106; phone: (816) 329-4130; fax: (816) 329-4090; email: gregory.davison@faa.gov

DG Flugzeugbau U.S. Representative, Western:

Pacific Aerosport, LLC, 17705 49th Place

N.E., Arlington, WA 98223

Tel: (360) 474-9394 Fax: (360) 474-1034

Email: <u>Chris@pacificaerosport.com</u> http://www.pacificaerosport.com

Eastern:

Seminole Lake Gliderport P.O. Box 135516 4024 Soaring Lane Clermont, Florida 34713 Tel: (352) 394-5450

Fax: (352) 394-5450 Email: soarfl@aol.com

DG Flugzeugbau GmbH Otto Lilienthal Weg 2 D-76646 Bruchsal

Tel: +49 7251 3020-100 Fax: +49 7251 3020-200

Email: sales@dg-flugzeugbau.de

DG	Flugzeugbau	GmbH
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page 1 from	Technical Note
No. 348/18 issue 2	No. 301/23 issue 2
843/21 issue 2	323/14 issue 2
370/9 issue 2	359/21 issue 2
866/10 issue 2	826/44 issue 2

Subject

: Lower mounting of the rudder

Effectivity

DG-100, DG-200, DG-300, DG-400, all models and all ser.no.'s

DG-500, DG-500M all models up to 5E23 DG-600, DG-600M all models and all ser.no.'s.

Accomplishment

: Instruction 1 with every daily inspection until instruction 3 has been executed.

Instruction 2: if necessary
Instruction 3: up to Dec. 31.2004

Reason

: On a DG-100 the universal bearing of the lower rudder mounting slipped out of the bearing support and the rudder fell out.

As the design is similar on all DG-types this kind of failure may occur on all DG's.

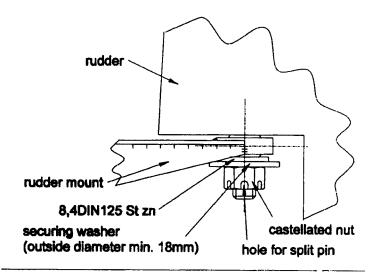
On later models this connection was secured by an extra securing washer.

Such a washer must be retrofitted to all DG-types with this TN.

Instructions

- Check if the outer bearing ring is correctly in place in the rudder mounting, the ring should not be visible.
- If the bearing is out of place the rudder mounting must be removed and the bearing must be secured by peening with a chisel or the complete rudder mounting must be exchanged. In addition execute instruction 3 at the same time
- Check if a securing washer (min. outside diameter 18mm, 0.71 inch) is installed according to the sketch.
 - a) If yes: The execution of this TN can be entered in the aircraft logs by a licensed inspector without further work to be done.
 - b) If no: Remove the castellated nut, install the washer 8.4 DIN9021 and reinstall the nut.
 - 1. Check if the washer is interfering with the rudder mount. If yes, use a washer 6,4DIN9021 St zn instead, enlarge the 6mm hole to 8mm to enable installation.
 - 2. Check if the split pin can be installed. If yes, secure with a new split pin 2x20 DIN94 zn.

If this is not possible, mark the position for a new hole and remove the rudder. Drill a new hole (diameter 2mm, .08 inch) 90° to the existing hole. Reinstall the rudder, use new split pins.



DG Flugzeugbau GmbH **Technical Note** page 2 from 2 76646 Bruchsal No. 301/23 issue 2 No. 348/18 issue 2 323/14 issue 2 843/21 issue 2 359/21 issue 2 370/9 issue 2 826/44 issue 2 866/10 issue 2

Material

: 1 washer 8,4 DIN9021 St zn, or 6,4DIN9021 St zn hole enlarged to 8mm

1 split pin 2x20 DIN94 zn 2 split pins 1,5x12 DIN94 zn If necessary lower rudder mounting:

DG-100, DG-200: L14 DG-300, DG-400: 4L14

DG-500: 5L9 DG-600: 6R14

Weight and balance

: influence negligible

Remarks

: Instructions No. 2 and 3 are to be executed by the manufacturer or by a licensed workshop and to be inspected and entered in the aircraft logs by a licensed

inspector.

Bruchsal, date:

LBA - approved:

June 11. 2004 Amended July7. 2004

Author:

The German original of this TN has been approved by the LBA under the date of Dipl. Ing. Wilhelm Dirks 0 8. Juli 04 and is signed by Mr. Blume.

W. O.

The translation into English has been done by best knowledge and judgement. EASA approved on 13 July 2004 under Approval No. 2004 - 74 74

Type certification inspector:

Dipl. Ing. Swen Lehner

Sun Zelm